

IRON SHIPS.

Rec 10/4/71

No. 5933 Survey held at Port Glasgow Date, first Survey 7th Sept 1870 Last Survey 31st March 1871

on the New Iron Screw Steamer "Strathclyde" Master W. H. Pearson

Tonnage under Tonnage Deck	1312.15	ONE, OR TWO DECKED VESSELS.	THREE DECKED VESSELS.	Built at
Ditto of <u>Lower</u> Deck	597.16	Half moulded breadth 17.5	Half Moulded Breadth 17.5	<u>Port Glasgow</u>
Ditto of <u>Upper</u> Deck	1509	Depth from upper part of Keel to top of Upper Deck Beams 20.5	Total Depth if three or more Decks 27.5	When built <u>1870 & 1871</u> Launched <u>24th Jan'y 1871</u>
L of Houses	141.41	Girth of Half Midship Frame 34.1	Total Girth of Half Midship Frame 41.1	By whom built <u>Blackwood & Gordon</u>
L of Forecastle	1950.72	1st Number 72.1	3rd Number 86.1	Owners <u>Burrell & McLaren</u>
Age	71.90	Length 288.5	Length 288.5	Port belonging to <u>Glasgow</u>
Age, as a	1878.82	2nd Number 208.0085	4th Number 248.3985	Destined Voyage <u>Glyde to London & Bombay</u>
Age, as a	1878.82	Depths to Length 10 fms 11	Breadths to Length 8 fms 9	If Surveyed while Building, Afloat, or in Dry Dock
Age, as a	1878.82			<u>While Building & Afloat</u>

Feet. Inches.	Feet. Inches.	Feet. Inches.	Horse.	No. of Decks, <u>3rd</u>	No. of Tiers of Beams <u>Three</u>
Rule, 288.5	Moulded Breadth, 35	Depth from top of Keel to Deck Beam, as per Rule . . . 27.5	Power of Engines, 180		

Dimensions of Ship per Register, length, 290 breadth, 35.2 depth, 18

	Inches in Ship.	Inches required per Rule.		Inches in Ship.	Inches required per Rule.
1, if bar iron, depth and thickness	10 x 2 1/2	10 x 2 1/2	Flat Keel Plates, breadth and thickness	36	36
2, if centre through plate, depth and thickness	9 x 2 1/2	9 x 2 1/2	Plates in Garboard Strakes, breadth and thickness	46	46
3, if bar iron, moulding and thickness	10 x 4 1/2	9 x 5	Do. from Garboard to upper part of Bilges	46	46
4, post do. do. do.	24	24	Do. of doubling at Bilge, or increased thickness, and length applied	12	12
5, distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	Do. from upper part of Bilge to lower edge of Sheerstrake	36	36
6, size of Angle Iron, for 1/2 length amidships	4 1/2	4 1/2	Do. Sheerstrake, breadth and thickness	36	36
7, for 1/2 at each end	4 1/2	4 1/2	Do. of doubling at Sheerstrake, and length applied	36	36
8, rised Frames, size of Angle Iron	3	3	Butt Straps to outside plating, breadth and thickness	4 1/2	4 1/2
9, str, depth and thickness of Floor Plate at mid line for half the length amidships	25	25	Lengths of Plating	10 feet	10 feet
10, Do. at the ends	19	19	Shifts of Plating, and Stringers	2 1/2 frames	2 1/2 frames
11, Do. do. do. at Bilge Keelson	19	19	Gunwale Plate on ends of <u>Upper</u> or <u>Lower</u> Deck Beams, breadth and thickness	40	40
12, Do. height extended at the Bilges	4 feet 2 inches	4 feet 2 inches	Angle Iron on ditto	4 x 4 x 3/8	4 x 4 x 3/8
13, Beams, Three Decked, <u>Spar</u> , or <u>Awning</u> Deck (No.) single or double Angle Iron, Plate or Tee Bulb Iron	7 5	7 5	Tie Plates (fore and aft), outside Hatchways	13 1/2	13 1/2
14, single or double Angle Iron on Upper edge	4 feet	4 feet	Diagonal Tie Plates on Beams (No. of Pairs,)	13 1/2	13 1/2
15, Average space	10 6	8 1/2	Planksheer material and scantling	14 x 4 1/2	14 x 4 1/2
16, Beams, <u>Upper</u> or <u>Middle</u> Deck (No.) single, or double Angle Iron, Plate or Tee Bulb Iron	10 6	8 1/2	Waterways do. do. <u>Keel</u>	4	4
17, Single, or double Angle Iron, on Upper Edge	4 feet	4 feet	Flat of Deck do. do. <u>Pitch</u>	4	4
18, Average space	10 6	8 1/2	How fastened to Beams	4	4
19, s, Lower Deck or <u>Orlop</u> (No.) single, or double Angle Iron, Plate or Tee Bulb Iron	10 6	8 1/2	Stringer Plate on ends of <u>Upper</u> or <u>Middle</u> Deck	43	43
20, Double Angle Iron on Upper Edge	4 feet	4 feet	Beams, breadth and thickness	4 x 4 x 3/8	4 x 4 x 3/8
21, Average space	17 9	17 9	Angle Irons on ditto (No.)	4 x 4 x 3/8	4 x 4 x 3/8
22, n Centre line, single or double plate, box, or <u>Intercoastal</u> , size of Plates	6 4	6 4	Tie Plates, outside Hatchways	13 1/2	13 1/2
23, Bulb Plate to Intercoastal Keelson	6 4	6 4	Diagonal Tie Plates on Beams (No. of pairs,)	13 1/2	13 1/2
24, Size of Angle Irons	28 3	28 3	Waterways materials and scantlings	6 1/2	6 1/2
25, Side Intercoastal Keelson, size of Plates	5 1/2	5 1/2	Flat of Deck do. do. <u>Iron</u>	6 1/2	6 1/2
26, Angle Irons on tops of Floors	9 1/2	9 1/2	How fastened to Beams	36	36
27, Bilge Keelson, Bulb Iron	5 1/2	5 1/2	Stringer Plates on ends of Lower Deck or <u>Orlop</u>	4 x 4 x 3/8	4 x 4 x 3/8
28, do. Angle Irons	12 1/2	12 1/2	Beams, breadth and thickness	4 x 4 x 3/8	4 x 4 x 3/8
29, Side Stringers (No.) size of Angle Irons	6 4	6 4	Angle Irons on ditto (No.)	4 x 4 x 3/8	4 x 4 x 3/8

20, s, material Iron or, if none, in what manner compensated for.

21, t-heads Iron Hawse Timbers Iron

22, lass Harfield's patent Pall Bitt Iron

23, Frames extend in one length from Keel to Gunwale

24, Reverse Angle Irons on the floors extend across the middle line to middle deck

25, the Frames, and to Gunwale alternately

26, ons. Are the various lengths of Plates and Angle Irons properly connected? Yes And are their butts properly shifted? Yes

27, Garboard, double or single Riveted to Keel, double or single at upper edge with Rivets (1 1/2 x 7/8 in.) diameter, averaging (5 1/2 x 5 1/2 ins.) from centre to centre.

28, Edges from Garboards to upper part of Bilge, worked Clencher, double or single Riveted; with Rivets (7/8 x 3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre.

29, Butts from Keel to turn of Bilge, worked carvel with butt straps (3/8 x 1/2 in.) thick, treble, double or single Riveted; with Rivets (7/8 in.) diameter averaging (3 1/2 ins.) from centre to centre.

30, Do the Butt Straps lay over and Rivet through the lands of the strakes above or below? No

31, Edges of Sheerstrake, double or single Riveted. At upper edge Single At lower edge Double

32, Butts from Bilge to Planksheers, worked Carvel with Butt Straps (1/2 in.) thick, double or single Riveted; with Rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre. Breadth of laps in double Riveting (5 1/2 inches) Breadth of laps in single Riveting (3 inches)

33, Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double Stringers at upper middle decks and Sheerstrakes for half length treble riveted

34, Planksheer, how secured to the plating of the sides, { Explain by Sketch, } See Sketch

35, Waterway ,, ,, planksheer and to the Beams, { if necessary. }

36, Beams of the various Decks, how secured to the sides? Beam ends turned down No. of Breasthooks, high Crutches, three

37, What description of Iron is used for the Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Mosend Iron

38, Manufacturer's name or trade mark, Mosend Iron Company

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature (Signed) for Blackwood & Gordon Surveyor's Signature, Andrew McGeachan Manager

Sam. L. L. Lloyd's Register

IRON 448-0228

Workmanship. Are the butts of plating planed or otherwise fitted? Planed
Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? Unfilled
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes and are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes
Are there any rivets which either break into or have been put through the seams or butts of the plating? A few **8875 Iron**

Her Masts, Bowsprit, Yards, &c., are in Good condition, and sufficient in size and length. ☒ they are of Iron ☐ Steel give the scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit No Bowsprit

Lower Masts of Iron. Circumference of 3 plates 16 each, three Angle Irons 4x3x5/8
Length of fore mast 85 feet
" " Main Mast 78 feet } Diameters at partners 27 inches

Number for equipment		Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
No.	SAILS.	CABLES, &c.	150	1 3/4	55 2/3 tons	1 3/4	55 2/3 tons	4865	31. 2. 14	29. 16. 2. 14	30. 0. 0	28 1/2 tons
	Fore Sails,	Chain	150	1 3/4	55 2/3 "	1 3/4	55 2/3 "	4865	31. 0. 14	29. 9. 1. 14	30. 0. 0	28 1/2 "
	Fore Top Sails,	(State Machine where Tested, and name of Superintendent).	"Gladys" Tipton Proving House				(State Machine where Tested, and name of Superintendent).	"Gladys" Tipton Proving House				
	Fore Topmast Stay Sails	Hamper Stream	Samuel Fiegmann, Superintendent				(State Machine where Tested, and name of Superintendent).	Samuel Fiegmann, Superintendent.				
	Main Sails,	Chain Cable	90	1 3/8	10. 10. 0. 0	1 3/8	Stream	1	12. 0. 2	11. 11. 1. 0	12. 0. 0	
	Main Top Sails,	Hawser	90	9 1/2		9 1/2	Kedges	1	6. 0. 8		6. 0. 0	
and	Share Sails	Towlines	180	5 1/2				1	3. 0. 0		3. 0. 0	
		Warp	180	4 1/2								
		All of good quality.										

and Spare Rigging sufficient in size and Good in quality. She has Eight Long Boats and Two fitted as Life Boats
Her Standing and Running Rigging Keen The present state of the Windlass is Harriet's Patent and Rudder Good Pumps One in each compartment connected with engine

Engine Room Skylights.—How constructed? Of Iron seven feet above deck How secured in ordinary weather? With quadrants and lifting covers
What arrangements are there for deadlights in such for bad weather? Glass half an inch thick protected with brass wire guards & tarpaulins

Coal Bunker Openings.—How constructed? Rims and lids How are lids secured? Screw & bonnet How high above deck? About one inch

Scuppers, &c.—What arrangements are there beyond the scuppers on deck, for clearing upper deck of water, in case of a sea coming on board?
No Bulwarks except Iron Rails

Cargo Hatchways.—How formed? Flat beams above deck wrought against beams and carlings lower edge upon Bull Irons State size Four members 12 feet by 8 feet
If of extraordinary size, state how framed and secured? Framed with iron plating 28 inches by 1 1/2 inch 3 1/4" x 1 1/2"
Angle Irons 4 1/2 x 3 x 5/8 above deck, and 8 x 3 x 5/8 below 12" x 8"

What arrangement for shifting beams? Two Bull Iron plates beams with Angle Irons connected with descent bolts and nuts

Hatches, themselves, whether strong and efficient? Yes, strong & efficient Main Hatchways.—State size 24 feet by 14 feet

Order for Special Survey No. 543 DATES of
Date 22nd August 1870 Surveys held
Order for Ordinary Survey No. _____ while building
Date _____ as per
No. 107 in builder's yard. Section 18.
1st. On the several parts of the frame, when in place, and before the plating was wrought
2nd. On the plating during the progress of riveting
3rd. When the beams were in and fastened, and before the decks were laid
4th. When the ship was complete, and before the plating was finally coated or cemented
5th. After the ship was launched and equipped
Special Survey
while building 30th
August 1870 to 31st
March 1871 in all
24 Visits

General Remarks, This vessel has been built under Special Survey as per Order No. 543. She is Brig rigged, having flush upper deck, except covered in spaces over engines, and for Officer's accommodation

The Stringer of Middle and lower decks are in excess of the Rules. She has also an Iron deck to the middle deck partly laid with wood. The upper deck stringer plate as per Section 28 is a little less in width than the Rule because of her being over eight breadths in length, but is compensated for by an additional Angle Iron all fore and aft at Gunwale both sides.

In what manner are the surfaces preserved from oxidation? Inside to upper part of bilge Portland Outside Bricks of Iron paint.
We are of opinion this Vessel should be Classed 100 A 1 Protect from bilge upwards Bricks of Iron paint

The amount of the Entry Fee£ 5 : : is received by me,

Travelling Expenses (if any)£ — : — : —

Special£ 73 : 15 : 6

X Certificate : : : :

Committee's Minute 11th April 1871

Character assigned 100 A 1 A & C

3 decked

Sam. Laphorn
R/P 3000 lbs.

This three decked Iron Steamer
appears eligible for Classification
as recommended above.
(Built under S.P.)

Lloyd's Register
Foundation